# Correspondence

## Letters to the Editor should not exceed 500 words.

### Mammography as a Screening Test for Breast Cancer

SIR,-Your leading article on mammography as a screening test for breast cancer (27 August, p. 484) is very welcome, as it shows that some attention is being focused on an important technique which has achieved considerable acceptance outside this country, but relatively little within it.

We feel, however, that your leader writer has emphasized the technical difficulties and failed to stress the implications, and that the relatively recent New York survey should have been considered with earlier work done in Philadelphia, New York, and Detroit,1-4 especially the Philadelphia survey in which a ten-year follow-up has been completed and modern methods of localization of small carcinomas developed. Pick-up rates would appear to be between two to four per 1,000 cases screened, and they compare favourably with other screening surveys, such as those for anaemias, diabetes, chest lesions, and cancer of the cervix.5-7 It would seem therefore on statistical evidence alone that more effort directed towards the early diagnosis and preventive aspect of breast cancer would be justified, and this should no longer take second place to the expensive and heroic surgical and radiotherapeutic measures which of necessity are still in use and often still advocated indiscriminately for both localized and advanced disease.

We are in full agreement that a method of selection of subjects at high risk would greatly increase the pick-up rate in any mammography survey and make it much more feasible. Although hormone assays and buccal smears, as mentioned in your leading article, are both possibilities, we would point out that thermography might be a profitable line of approach. Further simple criteria already known can be applied and will substantially increase the yield. We would suggest from our experience of over 2,000 mammograms that these criteria are:

- 1. All patients who have had one breast removed for carcinoma should have the contralateral breast x-rayed regularly. Although simultaneous bilateral carcinoma is uncommon (probably about 1%), metachronous carcinoma in the remaining breast is far from uncommon and the incidence rate ranges from 7% to 9%.8 It is unfortunate that more centres dealing with breast disease in this country and abroad do not use this simple mode of follow-up.
- 2. All patients who have a discharge from the nipple or develop pagetoid changes or retraction of it should have mammograms done. This can be most rewarding.9
- 3. Patients who have a family history of breast cancer or cancerophobia should have mammograms taken. We feel your leader writer's comment on this aspect of breast disease is misleading, as familial incidence in breast carcinoma has been reported1
- 4. Patients who have persistent pain or discomfort (possibly cyclical) or evidence of

breast dysplasia, especially disease, 11 12 should be examined by mammography.

Your leading article "Lumps in the Breast" (2 July, p. 1) has given rise to a spate of correspondence. It is perhaps significant that not until eight weeks had passed did a letter tentatively suggesting mammography in such cases appear (27 August, p. 522). To most clinicians and surgeons carcinoma is almost synonymous with a lump, and the idea that carcinoma of the breast can have an impalpable in situ stage13 is foreign to them. It has now been amply demonstrated that carcinoma at this stage can be either positively identified radiologically or a very high index of suspicion of its presence and position can be entertained.

Although we all subscribe to the dictum that all lumps of the breast must be biopsied, to accept the same ruling for an area in a breast under suspicion from mammography has yet to be accepted. But this is essential if we are to make full use of the early detection of breast cancer by surveys, and the development of operative techniques to identify these areas at operation and treatment by simple surgery are imperative.14 Early detection of this malignancy is now a practical possibility. If we continue to be content to await the development of a lump we shall have to be content with a prognosis which has not materially altered over the last thirty years.-We are, etc.,

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#### REFERENCES

- \*\*REFERENCES\*\*

  Gershon-Cohen, J., Hermel, M. B., and Berger, S. M., J. Amer. med. Ass., 1961, 176, 1114.

   personal communication. 1966.

  Witten. D. M., and Thurber, D. L., Amer. J. Roentgenol., 1964, 92, 14

  Wolfe, J. N., Radiology, 1965, 84, 703.

  Donaldson, R. J., and Howell, J. M., Brit. med. J., 1965, 2, 1034.

  Barry, M., and Fleming, H. A., ibid., 1965, 1, 756.
- <sup>7</sup> Smith, J. P., Muskett, J. M., and Easson, E. C.,
- Lancet, 1965. 2, 74.

  8 Missakian, M. M., Witten, D. M., and Harrison, P. G., 7. Amer. med Ass., 1965. 191, 1045.

  8 Samuel, E., and Young, B., Lancet, 1963, 2,

- 1006.

  10 Bucalossi, P., and Veronesi, U., Brit. J. Cancer, 1957. 11. 337.

  11 Davis, H. H., Simons, M., and Davis, J. B., Cancer (Philad.), 1964. 17, 957.

  12 Brit. med. J., 1965. 1, 469.

  13 Doll, R., ibid., 1965. 1, 471.

  14 Berger, S. M., Curcio, B. M., Gershon-Cohen, J., and Isard, H. J., Amer. J. Roentgenol., 1966, 96, 1046.

## Self-perpetuation of Bromism

Sir,—The four cases of bromism reported by Dr. G. Nuki and others (13 August, p. 390) were of considerable interest to us. In this area many bromide-containing proprietary medicines continue to be available without prescription, and the complications of chronic intoxication present themselves in both general medical and psychiatric practice. A recent admission to the hospital is felt to be worthy of report for two reasons. Dr. Nuki observes that a bromide rash may be helpful in diagnosis. In our case the bromism had presented and initially been identified by the skin manifestations. Further we feel it to be an illustration of the dangers of dehydration in persons with bromide intoxication. Although prior to surgery the serum bromide levels in this man had fallen below the generally accepted toxic levels, a post-operative dehydration appears to have precipitated a florid delirium.

A 60-year-old man who had not worked regularly for 15 years because of weakness and aching limbs was admitted to hospital for an evaluation of chronic peptic ulcer disease and nodular skin lesions. There was an eight-year nodular skin lesions. history of skin disorder, although the gross lesions had appeared only within the previous three months. On examination he appeared cachectic and chronically ill. The skin lesions, mainly over the anterior aspect of the legs, were multiple, crusty, and irregular verrucous lesions approximately 2 cm. in diameter. The tendon reflexes were reduced in the legs, and his behaviour was mildly confused.

A biopsy of the nodules showed marked acanthosis of the hyperkeratotic dermis consistent with diagnosis of bromaderma. The serum bromide level was found to be 93 mg./100 ml.

and questioning revealed that a "sleep mixture," which he had taken for many years, sometimes consuming 3 to 4 oz daily, contained approximately 4.5 g. of bromide per fluid ounce. Treatment with sodium chloride and mercurial diuretics reduced the serum bromide to 53 mg./ 100 ml. over the next four days, and it was felt safe to prepare the patient for surgery of his chronic duodenal ulceration. Three days later he underwent a pyloroplasty and vagotomy. Forty-eight hours after the operation he was restless, paranoid, and combative, making his medical management very difficult. removed his wound dressing and also the intravenous catheter from his arm. He appeared clinically dehydrated with characteristic halitosis and sordes of bromism. Serum electrolytes were not grossly disordered nor was his fever severe (99° F). The serum bromide estimation at this juncture was 13 mg./100 ml. sedated with chlorpromazine and rehydrated by intravenous infusion, upon which his delirium cleared. Retrospectively he spoke of confusion, delusional fears, and hallucinations extending over several years, Ironically, with each exacerbation of his "nervousness" he had been prone to increase his self-medication with his "sleeping mixture."

This patient's bromide poisoning only came to light after he developed associated skin lesions. He had experienced mental symptoms for some years but had been able to cover these up prior to hospitalization and surgery. Dehydration then precipitated an acute delirium despite a falling serum bromide level. Although other factors may have been at work, this case suggests that following prolonged bromide intoxication the serum levels may not accurately reflect the residual central nervous system involvement,